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January 29, 2007

CERTIFICATE OF THE SECRETARY OF ENVIRONMENTAL AFFAIRS ON THE SUPPLEMENTAL DRAFT ENVIRONMENTAL IMPACT REPORT

PROJECT NAME : Brookmeadow Village

PROJECT MUNICIPALITY : Grafton
PROJECT WATERSHED : Blackstone
EOEA NUMBER : 13608

PROJECT PROPONENT : Brookmeadow Village, LLC

DATE NOTICED IN MONITOR : December 23, 2006

As Secretary of Environmental Affairs, I hereby determine that the Supplemental Draft Environmental Impact Report (SDEIR) **adequately and properly complies** with the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62H) and with its implementing regulations (301 CMR 11.00). The proponent should submit additional information and analysis in a Final Environmental Impact Report (FEIR) as further detailed in the Scope below.

The proposed project involves development of 90 single-family residential units, recreational fields, and a commercial building (11,650 square feet) on an approximately 136-acre site. The site is mostly wooded and includes approximately 23 acres of wetlands. According to the SDEIR, the project will result in approximately 47.6 acres of land alteration including approximately 11.16 acres of impervious area. Wetlands impacts associated with the proposed project include alteration of 270 linear feet of Bank and 7,295 square feet (sf) of bordering vegetated wetlands (BVW). Traffic impacts are estimated at an average of 2,534 vehicle trips per day. Water use is estimated in the SDEIR at 23,675 gallons per day and the project will generate up to 40,915 gpd of wastewater (accounting for maximum daily peak flows, based on Title 5 values). The project includes approximately 1.66 miles of water mains and 1.38 miles of sewer mains.

The project is undergoing MEPA review and is subject to a mandatory EIR pursuant to Section 11.03 (1)(a)(1) of the MEPA regulations because it involved alteration of 50 or more acres of land (as proposed in the Environmental Notification Form (ENF)) and pursuant to Section 11.03(1)(a)(2) because it will result in creation of 10 acres or more of impervious area.

The project is also undergoing MEPA review pursuant to: Section 11.03(3)(b)(1)(d) because it involves alteration of 5,000 or more sf of BVW; Section 11.03(5)(b)(3)(c) because it involves construction of ½ mile or more of sewer mains; Section 11.03(6)(b)(1)(a) because it involves construction of a new roadway one-quarter or more miles in length; Section 11.03(6)(b)(13) because it will result in generation of 2,000 or more new average daily trips (adt) on roadways providing access to a single location; and Section 11.03(10)(b)(2) because it may involve destruction of an archaeological site listed in the Inventory of Historic and Archaeological Assets of the Commonwealth.

The project requires a 401 Water Quality Certification, a Distribution System Modification Permit, and a Sewer Extension Permit from the Department of Environmental Protection (MassDEP). The project also requires an Order of Conditions from the Grafton Conservation Commission (and on appeal only, a Superseding Order from DEP), and a Massachusetts Highway Department (MHD) Access Permit for access to Route 122. The project requires a permit from the State Archaeologist for an intensive (locational) survey. The project will also require a National Pollutant Discharge Elimination System (NPDES) Construction Activities Permit from the US Environmental Protection Agency (EPA).

The proponent is not seeking financial assistance from the Commonwealth. Therefore, MEPA jurisdiction applies to those aspects of the project within the subject matter of required state permits with the potential to cause Damage to the Environment as defined in the MEPA regulations. In this case, MEPA jurisdiction extends to land, stormwater and drainage, traffic, historic and archaeological resources, wastewater, water supply, water quality, wetlands and wildlife habitat.

Notice of Project Change (NPC)

As required by the Certificate on the DEIR, the SDEIR included a NPC describing activities proposed on the former Agway property adjacent to the project site and impacts associated with this component of the project. According to the SDEIR, the proponent purchased the former Agway property in order to provide recreational fields as required by the Town of Grafton during the local permitting process. In addition to the recreational fields, the proponent proposes a commercial building on this 6-acre portion of the site, which will increase the traffic impacts associated with the project to 2,534 vehicle trips per day (the DEIR estimated traffic generation at 953 trips per day based on consideration of residential use only). The SDEIR quantified the cumulative impacts associated with land alteration, impervious area, wetland, traffic, water supply and wastewater that will result from the combined residential, recreation and commercial uses of the entire project site (including the former Agway property). As indicated in the comment letter from the Executive Office of Transportation (EOT), the proponent will need to conduct a traffic study and the FEIR should address traffic impacts associated with the commercial use, as further detailed in the Scope below.

<u>Alternatives</u>

The SDEIR included an alternatives analysis that compared the impacts associated with the preferred alternative with those of a conventional subdivision, an alternative to avoid wetlands impacts, and the initial flexible subdivision plan submitted to the town. The alternatives analysis describes plan modifications that have been made during the local approval process to reduce environmental impacts. These modifications include elimination of house lots, a cul-desac, and earthwork on the eastern portion of the site, and adjustments to lot lines, set-backs and roadway alignment, which will provide additional open space and increase the amount of contiguous area between habitat locations.

As further detailed in the SDEIR, the proponent considered an alternative that would substantially reduce wetlands impacts by relocating one of the project's access roads. However, according to the SDEIR, this alternative would not comply with the Town of Grafton regulations because the distance between access points would be approximately half the minimum distance required for approval.

Wetlands and Wildlife Habitat

The proposed project requires a limited project wetland crossing for the main access road, which will result in approximately 7,295 sf of alteration to bordering vegetated wetlands (BVW). The SDEIR includes a commitment to mitigation by replicating BVW at a ratio of 1:1. The project also involves alteration of 270 linear feet (lf) of inland bank. A portion of this alteration is associated with construction of the main access road (190 lf) and the remainder (80 lf) is related to removal of an existing stone channel, which will be replaced with swales and is designed to eliminate flooding and improve existing conditions. The SDEIR discusses how the project will comply with applicable performance standards, including the wetlands regulations general performance standards for inland bank and BVW.

The SDEIR includes the results of a wildlife habitat assessment based on MassDEP Habitat Assessment Guidelines as they pertain to Wildlife Habitat Evaluations for "bank". As further detailed in the SDEIR, the study concluded that, upon maturation, the proposed replication area will provide adequate compensation for any impacts to the wildlife food value and nesting potential of plant species along the bank to be altered. The SDEIR also indicates that the wetland crossing will be designed with an open bottom arch or culvert, and in accordance with the US Army Corps of Engineers Programmatic General Permit conditions, to minimize disturbance of the stream and encourage wildlife movement beneath the new roadway.

As further detailed in the SDEIR, the Town of Grafton has issued a Wetlands Permit and an Order of Conditions for the project, which include special conditions that provide additional protection for wetlands and wildlife habitat. These conditions include requirements for easements with undisturbed vegetation corridors between lots, as well as Conservation Commission approval of timing of construction in order to protect sensitive vernal pool habitat and avoid adverse impacts during amphibian migration periods. The local wetlands permit also requires the proponent to designate a qualified Erosion Control Monitor, approved by the Commission to oversee activities on-site and conduct inspections and reporting.

Stormwater and Drainage

As further detailed in the SDEIR, the project is being designed to ensure that post-development conditions mimic pre-development conditions, and to meet all Massachusetts Stormwater Management Policy Standards. The proponent has developed an Operations and Management (O&M) Plan and an Erosion Control Plan, and will coordinate construction with local officials to minimize disturbance to wetlands resource areas.

The SDEIR describes design changes that have been made to protect vernal pools and other wetland resources. The project will not discharge drainage directly into wetlands areas around vernal pools. Most lots have been reconfigured to keep vernal pools and wetlands areas in designated open space areas. The project incorporates a number of low impact development (LID) techniques including open grassed channels and vegetated swales, and the proponent is investigating the feasibility of using permeable pavers for the recreational field parking area.

Water Supply and Wastewater

The proponent intends to obtain water supply for the development from the South Grafton Water District (the District). The SDEIR indicates that MassDEP will not issue a new Water Management Act (WMA) permit with increased annual withdrawal rates to the District until its Unaccounted for Water is reduced below 15% for three years. While the SDEIR indicates that the District has ample storage and infrastructure to supply the proposed project at full build-out, it is not clear whether the District has capacity to supply the project under its current WMA permit. This should be clarified in the FEIR as outlined in the Scope below.

The project, which is located within the Zone II of a public water supply source, includes construction of 7,000 feet of gravity sewer and a connection to the municipal wastewater system. The proponent has committed to gravity sewer design that will meet the standards for maximum water tightness. In response to the Certificate on the DEIR and concerns raised regarding water supply impacts related to blasting, the SDEIR describes studies undertaken to analyze blasting material for perchlorate byproducts. According to the SDEIR, there are no detectable levels of perchlorate in samples of the blasting material proposed for use at the project site. As further detailed in the SDEIR, the proponent has committed to perform a test blast at the initiation of the project and provide results to the District, and to conduct surface and groundwater monitoring for the presence of perchlorates and nitrate. The proponent will also monitor seismic activity in the vicinity of the Town's former landfill before and during blasting. According to the SDEIR, seismic vibrations from blasting are not expected to exceed 25% of what is normally experienced in residential neighborhoods, which is the regulated threshold.

In order to avoid and minimize impacts associated with the use of pesticides, fertilizers and other lawn chemicals, the proponent will implement a management plan in accordance with the Order of Conditions issued by the Grafton Conservation Commission. The Order includes special conditions that limit fertilizer use, and prohibit storage of fertilizer, pesticides or other landscape chemicals. The Order also prohibits the use or storage of road salt or other de-icing chemicals on the project site.

Sustainable Design

The SDEIR discussed the Leadership in Energy and Environmental Design (LEED) Certification for Homes and identifies a number of sustainable design features of the project including energy and water efficiency, materials recycling, implementation of a pesticide and fertilizer management plan, and use of ecological landscaping and LID techniques. The proponent has committed to presenting the LEED checklist to contractors as part of a LEED for Homes awareness process. The project will include efforts to inform contractors and homeowners of opportunities to reduce impacts to the environment and increase resource efficiency through design and practice. I commend the proponent for its efforts in this regard and encourage the proponent to implement high-performance/green buildings and other sustainable design elements to the extent feasible.

Historical and Archaeological Resources

The proponent has conducted investigations as requested by the Massachusetts Historical Commission (MHC), and identified a number of significant sites in the project area. The SDEIR describes measures to protect these areas from disturbance through implementation of a Preservation Restriction Agreement. The proponent should continue working with MHC to finalize the Preservation Restriction so that significant archaeological and cultural resources within the designated area will have long-term protection.

Mitigation Summary

The proponent has committed to a range of mitigation measures as further detailed in the SDEIR including:

- <u>Sustainable Design</u>: measures include a LEED awareness program for contractors and homeowners; recycling of surplus building materials; use of recycled products for siding and decks; energy-efficient windows and doors; house designs and orientation to encourage solar gain; energy star hot water heaters and appliances; water-efficient fixtures; ecological landscaping; stormwater recharge; and selective clearing to minimize land alteration and vegetation impacts.
- <u>Historical and Archaeological Resources</u>: implementation of a Preservation Restriction and a protection plan that will include fencing, signage, language in contract and construction documents, and other efforts to increase awareness of cultural resource protection requirements among construction personnel and contractors;
- <u>Traffic</u>: improvements to the intersection of Route 122/122A (note: additional mitigation may be required based on the results of the traffic study required by EOT);
- Wetlands and Stormwater measures include: an Erosion Control Monitor to provide inspection and reporting services; coordination of construction phasing with local officials; sedimentation and erosion control plan; a stormwater system O&M plan;

replication of 7,295 sf of BVW (1:1 ratio); wetland crossing design to encourage wildlife movement;

Water Supply: a booster pump station to achieve fire flow requirements; emergency
connections to the Grafton Water District and Whitinsville Water District; a Groundwater
Monitoring program to address concerns regarding potential contamination from the
adjacent landfill; monitoring for percholorates and nitrate; a management plan to restrict
fertilizers and pesticides; prohibition on use of road salt and de-icing chemicals.

SCOPE

General

The FEIR should include a project summary and maps and plans at a reasonable scale to facilitate review and comment. The FEIR should provide an update on consultations with state permitting agencies and discuss any changes to the project since the filing of the SDEIR. The FEIR should include a copy of this Certificate, a circulation list, and a copy of comment letters received on the SDEIR.

Water Supply

The FEIR should provide certification by the South Grafton Water District that the proposed project can be supplied with water under the Water Management Act requirements presently in place for the water district.

Traffic

The FEIR should include a revised limited traffic study performed in accordance with the EOEA/EOT guidelines for traffic assessments that provides Level of Service analysis for the site drive/377 Providence Road intersection, a detailed discussion of the site trip generation comparing the former and proposed land uses, and a disclosure of the last site occupancy date. The FEIR should include an updated mitigation plan to include measures commensurate with the increased traffic impact, and continue to work with MassHighway to finalize the mitigation plan for the Route 122/Main Street (122A) intersection. Mitigation should include left-turn lanes of sufficient length to accommodate the 50th percentile queue for the Route 122A approach, and STOP-sign relocation from the Route 122 southbound approach to the Route 122A eastbound approach. The FEIR should include a Transportation Demand Management (TDM) plan that includes measures to reduce site trip generation, such as posting information on the Worcester Regional Transit Authority (WRTA) bus line to Shrewsbury, Massachusetts Bay Transit Authority (MBTA) Commuter Rail Grafton Station, and the MassPike Park-and-Ride lot on Worcester Street (Route 122). The TDM plan should also include amenities to accommodate bicycling.

Response to Comments

The FEIR should provide a response to comments to the extent that they are within MEPA jurisdiction. The proponent should use either an indexed response to comment format, or direct narrative response. The FEIR should present any additional narrative or quantitative analysis necessary to respond to the comments received.

Mitigation and Section 61 Findings

The FEIR should include a revised draft Section 61 Findings to reflect any changes in mitigation commitments, schedule, responsibilities, and/or funding since the filing of the SDEIR. The draft Section 61 Findings should reflect any additional mitigation proposed based on consultations with state agencies during FEIR preparation.

Circulation

The FEIR should be circulated in compliance with Section 11.16 of the MEPA regulations and copies should be sent the list of "comments received" below and to others who commented on the ENF and DEIR. A copy of the FEIR should be made available for public review at the Grafton Public Library.

January 29, 2007 DATE

Ian A. Bowles, Secretary

Comments Received:

1/22/07	Department of Environmental Protection, Central Regional Office
1/22/07	Massachusetts Historical Commission
1/24/07	Executive Office of Transportation, Office of Transportation Planning

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